

## Volume 3. Air Operator Technical Administration

### CHAPTER 1. OPERATIONS SPECIFICATIONS

#### SECTION 6. PART H--HELICOPTER TERMINAL INSTRUMENT PROCEDURES AND AIRPORT AUTHORIZATIONS AND LIMITATIONS

**211. GENERAL.** Part H is issued to each operator who conducts Title 14 of the Code of Federal Regulations (14 CFR) part 135, part 91 subpart K, or part 129 instrument flight rules (IFR) operations with helicopters. It is not issued to part 135 operators who conduct only fixed-wing airplane operations. Part H is not usually issued to helicopter operators who are restricted to visual flight rules (VFR)-only operations. In rare situations, operations specifications paragraph H120 is issued to part 135 VFR-only operators who are authorized to conduct commuter operations with helicopters.

**213. H101--TERMINAL INSTRUMENT PROCEDURES.** H101 is issued to all helicopter operators who conduct any flight operations under IFR. IFR operators whose operations are restricted to the 50 United States (U.S.) are issued H101. If an operator is authorized to conduct any IFR helicopter operations outside of the United States, subparagraphs a(4) and b are applicable. Federal Aviation Administration (FAA) Order 8260.31, "Foreign Terminal Instrument Procedures," provides direction and guidance on acceptance of foreign terminal instrument procedures, if applicable. Additional information concerning terminal instrument procedures is in volume 4, chapter 2.

**215. H102--BASIC INSTRUMENT APPROACH PROCEDURE AUTHORIZATIONS--ALL AIRPORTS.** H102 specifies the types of instrument approaches the helicopter operator is authorized to conduct and prohibits the use of other types of instrument approaches. Before authorizing a type of instrument approach procedure, the principal operations inspector (POI) must ensure that the operator provides appropriate training for the types of approaches to be authorized. See volume 4, chapter 2, for information on required training for various types of approaches.

**217. H103--IFR LANDING MINIMUMS OTHER THAN AIRBORNE RADAR AND CATEGORIES II AND III APPROACHES--ALL AIRPORTS.** H103 specifies the lowest minimums that can be used for Category I (CAT I) nonprecision approaches. It also provides special limitations and provisions for instrument approach procedures at foreign airports, if applicable. If the operator

is not authorized to conduct operations outside the U.S., H103e is not applicable. See volume 4, chapter 2, for information on required training for circling maneuvers and contact approaches.

**219. H104--HELICOPTER EN ROUTE DE-SCENT AREAS (HEDA).** H104 is issued to all operators authorized to conduct IFR helicopter operations using helicopter en route descent procedures within specified areas of operation. It is not issued to helicopter operators who are not authorized to use helicopter en route descent procedures. Figure 3.1.6.1. illustrates one method of authorizing use of a particular HEDA.

**221. H105--ALTERNATE AIRPORT IFR WEATHER MINIMUMS.** H105 is issued to all operators who conduct IFR operations with helicopters.

**223. H106--IFR TAKEOFF MINIMUMS, HELICOPTER OPERATIONS--ALL AIRPORTS.** H106 is issued to all operators who conduct IFR helicopter operations. If an operator is not authorized to conduct operations outside of the U.S., H106c should be selected. See volume 4, chapter 2, for information concerning requirements an operator must meet before being authorized to use lower-than-standard takeoff minimums.

**225. H107--SPECIAL RESTRICTIONS FOR FOREIGN TERMINAL INSTRUMENT PROCEDURES.** H107 is issued only when the POI (or the region responsible for the geographic area where a foreign airport is located) finds it necessary to place special restrictions on a foreign terminal instrument procedure. These special restrictions to foreign terminal instrument procedures are applicable only to U.S. air carriers and part 91K operators. The purpose of these special restrictions is to establish an equivalency between the foreign terminal instrument procedure and ICAO (PANS-OPS) or U.S. (TERPS) criteria. FAA Order 8260.31 provides direction and guidance on how to place restrictions on foreign instrument procedures.

**227. H108-- CATEGORY II (CAT II) INSTRUMENT**

**APPROACH AND LANDING OPERATIONS. (In the operations specifications checklist, item o/s 7f will automatically select CAT II in the operations specifications.)**

CAT II operations are evaluated in accordance with volume 4, chapter 2, section 5, and are approved by issuance of paragraph H108. All initial CAT II operations for each operator and each aircraft used by that operator require regional office all weather operations specialist review and concurrence before the issuance of H108. This concurrence is also required before the POI may amend H108 to include an aircraft make/model/series (m/m/s) new to the operator. All reductions in CAT II operating minimums for each operator and aircraft require regional office concurrence.

*A. CAT II Approach and Landing Minimums and Authorized Aircraft.* Each aircraft m/m/s used in CAT II operations must be listed in subparagraph H108. The lowest decision height (DH) and lowest runway visual range (RVR) authorized for each aircraft must also be specified.

*B. Required CAT II Airborne Equipment.* The flight instruments, radio navigation equipment, other airborne systems required by the applicable regulation, and the FAA-approved rotorcraft flight manual (RFM) for the conduct of CAT II operations must be installed and operational. The additional airborne equipment listed or referenced is also required and must be operational for CAT II operations. There are two acceptable methods of demonstrating that an aircraft is airworthy for CAT II operations: a “type design approval” obtained by a manufacturer, or an “operational demonstration” conducted by an operator.

(1) *Type Design Approval.* The RFM (or supplement), for aircraft that have CAT II type design approval, contains a statement to the effect that the airborne systems have demonstrated the reliability and redundancy necessary for CAT II operations, in accordance with the current guidance, Advisory Circular (AC) 120-29, as amended, Criteria for Approval of Category I and Category II Weather Minima for Approach, as amended. These approved RFMs and supplements also specify that certain equipment is required for airworthiness approval of the various kinds of CAT II operations. Some of the approved RFMs also indicate that acceptable CAT II performance was demonstrated both with and without (w/wo) certain equipment (for example w/wo autothrottles). AC 120-29 also specifies that certain types of equipment are required for operational approval of the various kinds of CAT II operations (manual/autopilot). Therefore, both the RFM and AC 120-29 must be considered in determining the additional equipment that must be specified in H108.

(a) *Explicitly Required Equipment.* Equipment that is explicitly required by the aircraft certification regulations (14 CFR parts 27 and 29), the operating regulations (parts 91 and 135) and/or the RFM should not be specified in H108. The standard text of H108 requires this equipment to be functional.

(b) *Non-Explicitly Required Equipment.* When the RFM indicates acceptable performance both w/wo certain items of equipment not explicitly required by AC 120-29, as amended, the POI must determine how the operator intends to conduct CAT II operations and train flightcrews with those items of equipment. If the operator proposes to conduct operations both w/wo certain items of equipment (such as autothrottle, autopilot), flightcrews must be trained for both situations, and the item of equipment does not need to be listed in H108. If the operator proposes to conduct operations only when those items of equipment are functional, then those items of equipment must be specified in H108.

(2) *Operational Demonstration by the Certificate Holder.*

(a) *Non-Type Design Equipment.* The operational demonstration method of ensuring the airworthiness of CAT II equipment is only appropriate for aircraft and equipment that do not have CAT II type design approval. The certificate holder must conduct the operational demonstration in accordance with AC 120-29, as amended. The additional equipment that must be specified in H108 is determined by considering the equipment required by the rotorcraft certification regulations (parts 27 and 29), operating regulations (parts 91 and 135), AC 120-29, as amended, and the equipment configuration used during the operational demonstration of airworthiness conducted by the operator. Equipment required by the rotorcraft certification regulations and operating regulations should not be listed in H108. Equipment required by AC 120-29, as amended, and any other items of equipment essential to the CAT II equipment configuration used in the operational demonstration of airworthiness must be listed as additional equipment in H108.

(b) *Manual/Autopilot Operations.* Manual and/or autopilot operations must be specified for each item of equipment listed in H108. The POI accomplishes this by selecting the appropriate item of equipment. If an item of equipment is applicable to both manual and autopilot, both must be selected. If only one kind of CAT II operation is authorized, then the X’s must be placed in the appropriate “Manual” or “Autopilot” column. For examples of how the items of equipment should be specified for the kind of CAT II operation.

*C. Required RVR Reporting Equipment.* These requirements are automatically issued in H108.

*D. Pilot Qualifications.* These requirements are automatically issued in H108.

*E. Operating Limitations.* These requirements are automatically issued in H108.

*F. Missed Approach Requirements.* These requirements are automatically issued in subparagraph H108.

*G. Authorized Landing Areas.* Airports and runways for which an operator is authorized to conduct CAT II instrument approach and landing operations are specified by H108. If the airport and runways are approved for CAT II operations in 14 CFR part 97, they should not be listed in H108 unless the POI determines that there is a need to specify a special limitation for an operator at a particular airport. If the CAT II approach procedure is published in the National Oceanic and Atmospheric Administration (NOAA) "Instrument Approach Procedures" flight information publication as a CAT II procedure, it is approved in part 97. Airports and runways not listed in part 97, but approved for operator use, must be specified in H108.

**229. H109--CATEGORY III (CAT III) INSTRUMENT APPROACH AND LANDING OPERATIONS.** CAT III operations are evaluated in accordance with AC 120-28, "Criteria for Approval of Category III Landing Weather Minima" (as amended), and this handbook (see volume 4, chapter 2, section 6). POI's approve CAT III operations by issuing paragraph H109. Before a POI may issue or amend paragraph H109, the POI must coordinate with and obtain written concurrence from the appropriate regional office all weather operations (awo) specialist. That written concurrence must contain each operation and each m/m/s of aircraft used by that operator.

*A. CAT III Approach and Landing Minimums.* The decision height/alert height (DH/AH) and lowest RVR authorized for each m/m/s of aircraft type must be specified in H109 for the kinds of CAT III operations authorized. CAT IIIa fail-passive operations must use a 50-foot DH. Most CAT IIIa/IIIb fail-operational operations use a 50- or 100-foot DH. Use of a DH in conjunction with an AH for these operations is inappropriate. Sometimes, however, a DH is required for fail-operational CAT III operations (see AC 120-28). In these situations, a 50-foot DH or less should be specified. Use of an AH in these operations is inappropriate. Figure 3.1.6.2. illustrates the method for authorizing each aircraft in H109.

*B. Required CAT III Airborne Equipment.* The equipment required to conduct CAT III operations for each aircraft m/m/s is specified by H109b and is established in accordance with the applicable regulation, the RFM, and AC 120-28 (as amended). The only acceptable method of demonstrating the airworthiness of an aircraft for CAT III operations is through type design approval obtained by a manufacturer. The RFM (or supplement), for aircraft that have CAT III type design approval, contains a statement to the effect that the airborne systems have demonstrated the reliability and redundancy necessary for CAT III operations, in accordance with AC 120-28. These RFM's also specify that certain equipment is required for airworthiness approval of the various kinds of CAT III operations. Some of the RFM's also indicate that acceptable CAT III performance was demonstrated both w/wo certain equipment (for

example w/wo autothrottles). AC 120-28 also specifies that certain types of equipment are required for operational approval of the various kinds of CAT III operation. Therefore, the POI must consider both the RFM and volume 4, chapter 2, section 6, of this handbook when determining the additional equipment to be specified in H109.

(1) *Additional Equipment.* Equipment that is explicitly required by the rotorcraft certification regulations (parts 27 and 29), the operating regulations (parts 91 and 135), and the RFM should not be specified in H109. The standard text of H109 requires this equipment to be functional. Therefore, the additional equipment that must be specified in H109 is determined by cross-checking the types of equipment required by AC 120-28 for the kind(s) of CAT III operation(s) proposed against the equipment required by the regulations and the RFM. The additional equipment to be specified in H109 is not only that explicitly required by the regulations and the RFM, but also that required by AC 120-28 and the direction of the regional AWO specialist and POI.

(2) *Special Provisions.* When the RFM indicates acceptable performance both w/wo certain items of equipment (which are not explicitly required by AC 120-28 or AWO), the POI shall specify in H109 those items of equipment that the operator intends to use. If the operator proposes to conduct operations only when those w/wo items of equipment are functional, then those items of equipment must be specified in H109.

*C. Kinds of CAT III Operations.* Fail-passive and/or fail-operational must be specified for each item of equipment listed in H109 for each aircraft type. POIs accomplish this by selecting the appropriate statement adjacent to each item of equipment. If an item of equipment is applicable to more than one kind of operation, it must be indicated in appropriate columns.

*D. Pilot Qualifications.* Minimum qualifications for rotorcraft pilots are automatically issued in H109.

*E. Operating Limitations.* Limitations for rotorcraft operations are automatically issued in H109.

*F. Missed Approach Requirements.* These requirements are automatically issued in H109.

*G. Authorized CAT III Airports and Runways.* All airports and runways to which an operator is authorized to conduct instrument approach and landing operations are specified in H109. If the POI and the regional AWO determine that there is a need to specify special limitations for the operator at a particular airport (for example, SEA 16R), then those special limitations shall be specified in H109. All CAT III airport and runway approvals are approved in accordance with FAA Order 8400.8, Procedures for Approval of Facilities for FAR Part 121 and Part 135 CAT III Operations; AC 120-28; and this handbook. Certain airports and runways (SEA, MSP, CVG, PIT) require AFS-

400 evaluation and approval for each aircraft type. POIs must contact the regional AWO for further direction and guidance concerning the approval of CAT III airports and runways. Figure 3.1.6.3. illustrates how POIs should complete H109.

### **231. H110--FLIGHT CONTROL GUIDANCE SYSTEMS FOR AUTOMATIC LANDING OPERATIONS OTHER THAN CATEGORIES II AND III.**

A. H110 authorizes an operator to use a flight control guidance system with automatic landing capabilities to touchdown. Before issuing H110, the POI must determine the following:

- The RFM permits use of the flight control guidance system (autoland system) to touchdown
- Training on the use of the flight control guidance system and autoland procedures is provided to flight crewmembers
- The operator continually maintains flight control guidance and autoland systems in accordance with an approved maintenance program for autoland operations

B. The helicopters (make/model) and the flight control guidance systems (manufacturer/model) authorized for this type of operation, must be listed in subparagraph H110. Figure 3.1.6.4. is an example of how the helicopter and flight control guidance systems should be listed.

### **233. H111--MANUALLY FLOWN FLIGHT CONTROL GUIDANCE SYSTEM CERTIFIED FOR LANDING OPERATIONS OTHER THAN CATEGORIES II AND III. (TBD)**

### **235. H112--INSTRUMENT APPROACH OPERATIONS USING AN AREA NAVIGATION SYSTEM. (TBD)**

### **237. H113--SPECIAL TERMINAL AREA IFR OPERATIONS--AUTHORIZATIONS, LIMITATIONS, AND PROVISIONS.**

A. H113 authorizes an operator to conduct the following types of special operations:

- Nonscheduled passenger and cargo and scheduled all-cargo terminal area IFR operations outside of controlled airspace
- Scheduled passenger terminal area IFR operations outside of controlled airspace and at locations without an operating air traffic control tower
- Use of special (non-part 97) instrument approach or departure procedures

B. *Nonscheduled Operations.* Before authorizing nonscheduled terminal area IFR operations outside of

controlled airspace, the POI must determine that the operator has a method or procedure for obtaining and disseminating necessary operational information. This operational information must include the following:

- The airport is served by an authorized instrument approach procedure (and departure procedure when applicable)
- Applicable charts for crewmember use
- Operational weather data from an approved source for control of flight movements and crewmember use
- Status of airport services and facilities at the time of the operation
- Suitable means for pilots to obtain traffic advisories

### **239. H114--SPECIAL AIRPORT AUTHORIZATION, PROVISIONS, AND LIMITATIONS FOR CERTAIN AIRPORTS.**

A. *General.* OpSpec H114 provides for special helicopter authorizations into certain airports. The authorizations include the following:

(1) Part 135 air carriers to conduct helicopter operations into airports that because of special **operational** considerations may require special aircraft performance charts and equipment, special lighting (i.e., flare pots, etc.), or special helipads and **special** flight crewmember training. These may include but are not limited to:

- (a) operations into airports with special runway markings, such as flare pots or trees;
- (b) high altitude airports with special performance requirements;
- (c) airports in or near precipitous terrain, and
- (d) airports with unpaved runways or runways constructed on frozen lakes and rivers.

(2) For authorizing part 135 air carriers to conduct helicopter operations using the Reginald Bennett International Runway ReflectORIZATION System in Alaska:

(a) The air carrier must provide a station agent at the airport trained to give wind information to the flightcrew, and

(b) Train its flightcrews on this specific system in accordance with an approved training program. The training program must be approved in accordance with the following criteria:

- i. Each pilot must receive initial and recurrent training in accordance with his or her company-approved training program.

ii. Initial training must be completed by each person (both ground and flight personnel) prior to that person's participation with this authorization.

iii. Recurrent training must be completed within each subsequent 12 calendar months.

iv. Whenever a person who is required to take this recurrent training completes the training in the calendar month before or the calendar month after the month in which this recurrent training is required, that person is considered to have completed it in the calendar month in which it was required.

(c) The Sample Table 1, below, shows how to provide authorization for conducting operations after curfew hours at specific airports or use of the RBI Runway

Reflectorization system at specific airports in Table 1 of OpSpec H114.

*B. Authorizations Where Other OpSpecs May Be Applicable.*

(1) OpSpec H122 should be used for listing the airports/runways where AFS-400 has approved specific "Special" instrument procedures for a certificate holder.

(2) OpSpec H107 is applicable for authorizing specific foreign terminal instrument procedures.

(3) OpSpec H121 is applicable for authorizing a certificate holder to conduct helicopter operations in airport terminal areas in Class G and E airspace.

C. The requirements of 14 CFR section 135.229, Airport Requirements, must be met.

**Sample of Table 1 –Airports and Special Provisions**

Airport Location/Identifier	Special Provisions and Limitations and Special Flight Crewmember Training
PKEK, Ekwok, Alaska	A station agent is required to give wind information to the flightcrews and the flightcrew must have completed the required approved training on the RBI Runway Reflectorization System
Tahiti Island, Society IS; PPT/NTAA	Approved as destination airport without an available alternate.

**241. H117 -- CATEROGY I, ILS, MLS, OR GLS APPROACH PROCEDURES WITH SPECIFIC IFR LANDING MINIMA.** H117 prescribes conditions and limitations for straight-in category I precision instrument approach procedures. It also provides special limitations and provisions for instrument approach procedures at foreign airports if the operator is authorized to conduct operations outside the United States in B050. See volume 4, chapter 2 for information on required training for precision approaches.

**243. H118 -- HELICOPTER CIRCLE-TO-LAND MANEUVERS USING IFR CATEGORY I LANDING MINIMUMS.** H118 prescribes the lowest minimums that can be used for CAT I circling maneuvers. See volume 4, chapter 2 for information on required training for circling maneuvers.

**245. H119 -- HELICOPTER IFR CONTACT APPROACHES USING IFR CATERGORY I LANDING MINIMUMS.** h119 prescribes the lowest minimums that can be used for category I contact approaches. See volume 4, chapter 2 for information on required training for contact approaches.

**247. H120--AIRPORTS AUTHORIZED FOR**

**SCHEDULED OPERATIONS.**

A. Under 14 CFR part 119, the operations specifications must prescribe the authorizations and limitations for each type of operation. All regular, provisional, and refueling airports shall be listed in the operations specifications of all operators conducting scheduled operations. This includes helicopter commuter operations. The operator may provide a list of these airports which can be incorporated into the operations specifications by reference to the list in H120.

B. If the airports are to be listed in H120, the operations specifications worksheet and computer provide a template for the Information that must be listed. This information includes the following:

- Airport name
- Three-letter identifier of the airport, if available
- Aircraft authorized to use the airport (Normally, the operator's aircraft can be listed in the seven spaces provided at the top of the "Authorized Aircraft" column.)
- A notation that the airport is a regular airport (R) for the type of aircraft authorized

C. Figure 3.1.6.5. is an example of how this information

can be formatted:

**NOTE: If an airport is designated as provisional, the regular airport for which it serves as a provisional airport must be annotated. (Except in unique situations, an airport should not be designated as a provisional airport if it is located more than 30 statute miles from the regular airport.)**

D. If the operator provides a list of airports to be incorporated into H120, this list must provide the same type of information previously discussed. This list must be annotated with the effective date of the listing. The list does not need to be physically attached to H120, but it must be maintained on file in the certificate-holding district office (CHDO) with copies of the operator's operations specifications. If a list is provided by the operator, no entries should be made on the operations specifications worksheet or in the computer. If no entry is made, the computer will automatically print "See Attached Listing" below the text of H120.

E. H120 specifies that the operator must maintain a list of alternate airports that can be used. The list of alternates may be integrated into the list provided by the operator, if desired. If a separate list of alternate airports is maintained by the operator, it is not necessary for the FAA to maintain a copy. The POI, however, should occasionally inspect the list of alternates to determine airport and aircraft compatibility.

#### **249. H121. SCHEDULED PASSENGER TERMINAL AREA IFR ROTORCRAFT OPERATIONS IN CLASS G AIRSPACE.**

*A. Scheduled Operations.* Before authorizing scheduled terminal area IFR helicopter operations outside of controlled airspace, or at airports without an operating air traffic control tower, the POI must obtain and list the following information in H113.

- Names of airports
- Source of weather information to be used by flightcrews (see volume 3, paragraphs 789 and 791)

- Sources of traffic and airport advisories

*B. Sources of Traffic and Airport Advisories.* Certificate holders may be authorized to use any two-way radio source of air traffic advisory information listed in the Airman's Information Manual (for operations in U.S. airspace) or equivalent aeronautical information publications (for foreign operations).

(1) These sources include common traffic advisory frequencies, unicom, multicom, and flight service stations.

(2) If an air traffic advisory source is also suitable for determining the status of airport services and facilities, it is the only source that needs to be listed in H121.

(3) When airport services and facilities information is on a different frequency than the traffic advisory frequency, both sources should be listed in H121.

(4) In those cases where two sources are listed at the same airport, inspectors must ensure that the operator's manuals have procedures that require pilots to continuously monitor and use the traffic advisory frequency when operating within ten nautical miles of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 miles from the airport.

(5) At some airports, no public use frequencies may be available. In those cases, a certificate holder must arrange for radio communication of essential information including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who operate a company radio for airport status and traffic advisory must be able to view airspace around the airport.

#### **251. H122 - SPECIAL TERMINAL INSTRUMENT APPROACH OR DEPARTURE PROCEDURES. (TBD)**

#### **252.-260. RESERVED.**

FIGURE 3.1.6.1.

Authorized Helicopter En Route Descent Areas	Lowest Authorized Altitude (LAA)	Remarks, Limitations, and Conditions
Eugene Island Block 191	400 Ft.	Increase LAA to 700 Ft. with radar altimeter or mapping radar inoperative

FIGURE 3.1.6.2.

1. CATEGORY 111a FAIL-PASSIVE OPERATIONS		
AIRCRAFT TYPE MAKE/MODEL/SERIES	DH/AH	LOWEST AUTHORIZED RVR
BH-222	50 DH	700
2. CATEGORY IIIa FAIL-OPERATIONAL OPERATIONS		
AIRCRAFT TYPE MAKE/MODEL/SERIES	DH/AH	LOWEST AUTHORIZED RVR
SK-76	100 AH	700
3. CATEGORY IIIb FAIL-OPERATIONAL OPERATIONS		
AIRCRAFT TYPE MAKE/MODEL/SERIES	DH/AH	LOWEST AUTHORIZED RVR
SK-76	100 AH	300

FIGURE 3.1.6.3.

AIRPORT	RUNWAYS	SPECIAL LIMITATIONS
William B. Hartsfield Atlanta, GA (ATL)	8L, 8R	

FIGURE 3.1.6.4.

AIRCRAFT TYPE (MAKE/MODEL)	FLIGHT CONTROL GUIDANCE SYSTEM (MANUFACTURER/MODEL)
S-76	Astronautics P/N 131810
Bell 222	Sperry SHZ-222

FIGURE 3.1.6.5.

AIRPORT NAME	IDENT	AIRCRAFT AUTHORIZED					P. FOR IDENT
		SK61	BH222				
Albany County	ALB	R	R				
John F. Kennedy Intl.	JFK	R	R				
La Guardia	LGA	R	R				

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